China's Cotton Sector Under Stress

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Abstract: China maintains a government monopoly on cotton purchases, but there are indications this policy could be relaxed in the future. This monopoly is a vestige of the centralized planning process formerly applied to the entire economy, and in recent years its enforcement has been tightened and relaxed as cotton surpluses have ebbed and flowed. Similarly, China's trade policy has alternated between import and export restrictions to accommodate perceived scarcity and surfeit. Currently, China's domestic supplies of cotton and other agricultural products are large. How China's policymakers address these circumstances will also be affected by the financial health of the country's numerous state-owned enterprises, particularly those producing textiles, and the costs associated with purchasing cotton through the government's Cotton and Jute Company.

Keywords: Cotton, China, policy, procurement, textiles, state-owned enterprises, Cotton and Jute Company

Cotton is still a "planned" commodity in China, but progress towards more market-driven decisionmaking has been accelerating. China's cotton stocks are at nearly their highest level ever, government procurement is clogged with cotton purchased above world prices, and the state-owned segment of the textile industry is reeling from growing inventories and debts. To alleviate this situation, China's government has resorted to price bands, cotton fairs, import restraints, and procurement price cuts. Now, China may be on the brink of taking some of the biggest steps in 20 years toward liberalizing its cotton production and purchasing. This paper lays out the institutional and policy framework that has directed cotton supply and use in China in recent years, and indicates possible directions for its continuing evolution.

China's economy is guided by both independent market events and by government decisions regarding—for example—purchasing, lending, and prices. About 20 years ago, led by the agricultural sector, the role of market-driven decisions began steadily growing, and cotton is now one of the few remaining goods with such obvious vestiges of central planning as the prohibition of private trading. Tobacco and cotton are the only agricultural products for which the state maintains a monopoly on purchases from farmers. For cotton, this monopoly has not been perfectly enforced, and has been relaxed during some years of relative surplus.

Planning and Planting

China's government develops economic plans annually and reviews them quarterly. The role of these plans has declined tremendously in the last 20 years, but for cotton, in particular, the role is far from trivial. Ultimately, China's economic decisionmaking is guided by the Communist Party, which controls the government. Government decisionmaking is implemented through the State Council. To formulate a plan for cotton production, the State Development Planning Commission receives information on expected domestic cotton demand from the All-China Federation of Supply and Marketing Cooperatives (SMC) and the State Textile Industry Bureau. Information from the Ministry of Agriculture helps determine likely production levels in the coming year. A plan covering how stock adjustments and trade can be used to balance consumption and production is then developed. Appropriate prices for cotton purchases and sales are also determined to balance the needs of cotton production, competing crop production, farmer welfare, and the financial health of the textile industry. The cotton plan is also developed in the context of the government's plans for the rest of the economy.

Price is one of the most important of the government's tools for fulfilling its goals. In a mixed economy like China's, farmers can make substantial adjustments in production depending on prices. However, history suggests that government prices have not always fulfilled government objectives: price announcements have sometimes come too late to

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Government and Economic Participants in China's Cotton Sector

SMC: Supply and Marketing Cooperatives

A department of the Bureau of Internal Trade; manages and administers government procurement and distribution of agricultural products. In 1997, the SMC interacted with 160 million farm households, about 85 percent of all those in China.

CJC: Cotton and Jute Company

A department of SMC; responsible for the administration of cotton purchasing, testing, processing, storing and marketing in China. It has 25 provincial companies, 110 prefectural companies, 830 companies at the county level, 15,000 cotton-purchasing stations, and 2,300 cotton gins, with a processing capacity of 6 million tons.

PCC: Xinjiang Production and Construction Corps

The PCC is a military entity tasked with both defense and economic development in Xinjiang-Uighur Autonomous Region. Governing a region so distant and culturally distinct from China's eastern provinces poses unique difficulties, and the PCC's development has been one response. The PCC's cotton planning, financing, and marketing channels are distinct from those for the rest of Xinjiang.

Chinatex: China National Textiles Import and Export Corporation

Chinatex is a specialized foreign trade corporation directly attached to the Ministry of Foreign Trade and Economic Cooperation. Chinatex specializes in all kinds of textile materials, garments, cotton and woolen products and other imports and exports approved by the state. Chinatex has 14 subsidiary companies, over 30 overseas enterprises, and over 20 domestic branches in the country's major provinces and cities. Cotton trade is handled by a subsidiary, Chinatex Cotton Import and Export Corporation.

SOEs: State-owned enterprises

SOEs are firms either nationalized by China's government after 1949 or owned by the government since inception. At one time virtually all of China's industry was state-owned. Profitability at such firms often lags due to overstaffing, a history of politically-guided decisionmaking, and extensive social obligations to the firms' employees and communities.

JVEs: Joint-venture enterprises

Beginning in 1978, China opened its economy to outside influences, permitting foreign investment. This has largely taken the form of joint ventures with SOEs. Local partners have often proven crucial, given the regulatory hurdles inevitable in China's rapidly evolving economic and legal system. Similarly, foreign partners provide management and technical expertise as well as access to overseas markets and sources of imported inputs for processing.

TVEs: Township and village enterprises

After rapid growth in the late 1980s and early 1990s, TVE industrial output in 1995 equaled nearly 30 percent of China's GDP. Food, clothing, building materials, and other products that can be produced with relatively low capital inputs are their major products. During the late 1980s, modernizing SOEs regularly transferred their older spindles to TVEs. Currently, competition from TVE textiles may be hurting the profitablity of SOEs.

influence farmer decisions during the current year, and have sometimes come too early, leading farmers to withhold their crop until the following year. Problems with the timing and level of procurement prices probably reflect the need to find consensus among the different interests represented in the planning process as well as the inherent difficulties of accurately forecasting future supply and demand trends.

While prices are one signal to farmers regarding how much cotton to produce, local governments may also at times pressure farmers to achieve specific planting and production targets. Under the plan, achieving a planned production level becomes government policy, and local governments, particularly in areas designated as cotton production bases, take responsibility for ensuring an appropriate level of planting. While government control of day-to-day life in China has declined in recent years, government influence remains large in many aspects of farmers' lives, and may affect their agricultural production decisions.

In China's largest producing province, Xinjiang, the Production and Construction Corps (PCC) accounts for about one-third of production. The PCC is a military entity charged with developing and defending China's most remote province. As state farms, PCC producers are more tightly integrated into the economic planning system, and more quickly and completely responsive to central government policy.

Purchasing, Procurement, and Distribution

As cotton is harvested in the fall, farmers bring both ginned and unginned cotton to SMC and the China Cotton and Jute Company (CJC, a subsidiary agency of the SMC) purchasing stations. The cotton is graded and the farmer receives payment from CJC based on fixed procurement prices for that quality of cotton. Official policy during much of the 1990s is that farmers are to be paid immediately rather than over the following months, and CJC therefore borrows from the China Agricultural Development Bank to ensure sufficient capital to make these initial purchases. The China Agricultural Development Bank is what is known as a policy bank, lending to government agencies in accordance with government policy and assuring they can fulfill their policy obligations. The CJC is expected to receive payment at the time it transfers cotton to textile firms and then repay its bank loans.

How closely practice actually follows the above outline depends on the relative supply and demand for cotton at prices fixed by the government for purchases from farmers and sale to mills. During the mid-1990s, insect infestations, rising grain prices, and a legacy of several years of low procurement prices and late payments to farmers, led to crop shortfalls. With the economy booming, farmers found alternative marketing channels that paid prices well above procurement prices, and mills found it difficult to buy as much cotton as they would have liked from the CJC at official prices. CJC was able to earn profits by procuring below the black market price and quickly selling to textile mills. Government efforts to alleviate the shortage through releases from stocks in the State Reserve proved ineffectual.

On the other hand, when supplies are relatively large, as they are currently, textile mills are reluctant to buy from CJC at fixed official prices, meaning that CJC cannot repay its loans, hindering its further procurement efforts. In effect, the price to farmers may then be reduced by payment delays or surreptitious discounts and quality downgrading. At such times, the government has occasionally announced procurement ceilings, and encouraged farmers to sell cotton elsewhere. During the mid-1980s, record cotton production led to such ceilings, and the government encouraged the development of textile mills organized as township and village enterprises (TVE) to purchase and process this "excess" cotton. This simultaneously helped raise incomes and use excess labor in rural areas, and provided an outlet for cotton that could not be effectively used by the mills that were state-owned enterprises (SOEs).

The system of government monopoly on procurement from farmers and a monopoly on allocation to the textile mills was developed to implement planned levels of textile production. CJC owns nearly all the cotton ginning capacity in China, and until the mid-1980s, virtually all of the textile firms were SOEs. In the course of the economy's liberalization, joint-venture enterprise (JVE) mills with foreign investors have been established, and later the TVE mills grew as well. The JVE textile mills are much less tightly integrated into the planning process than the SOEs, and the TVEs are largely outside it.

The share of cotton production purchased by the government has fluctuated significantly in recent years, indicating the official monopoly is not complete. Some observers believe part of this gap between reported cotton production and procurement reflects inflated production data. However, it is universally acknowledged that cotton is sold outside of the official, fixed-price procurement channels. There are numerous cotton gins not under control of government agencies officially tasked with ginning (CJC, the Ministry of Agriculture, and the Xinjiang PCC), and the TVEs are advantageously positioned to make direct purchases from local farmers, bypassing procurement.

Textile Industry Consumption

Garments and other consumer textile goods are essentially freely traded in China, and China has been a major exporter of yarn, fabric, and garments for a number of years. The state-owned mills, which are directly influenced by government planning, play a major role in textile production—particularly at the initial, capital-intensive stage of spinning—but textile production and sales in China are under less government control than raw cotton.

Garment production is particularly far removed from the planning process since domestic consumers' purchasing decisions are freely made, and export demand is beyond the control of China's government. TVEs account for 60-80 percent of China's garment production, and, since TVEs are excluded from government planning (although in many cases they are owned and managed by local governments), the production as well as the consumption side is largely outside of direct state control for garments. However, in 1997, SOEs accounted for 32 percent of the output of China's textile industry, while accounting for 15 percent of all the firms. As their above-average size indicates, SOEs are more involved in the capital-intensive spinning portion of the industry. JVEs are particularly prominent in producing for export, and are also more oriented towards garment production than the state-owned sector. With their foreign participation and export orientation, the JVEs are much less integrated into the plan than the SOEs.

Participating in the plan sometimes means that production continues, despite lagging sales and rising inventories, simply to fulfill a planned level of output. SOEs often have access to government-backed loans that have enabled them to remain in business despite rising financial losses. On average, the state-owned textile sector lost a reported 5 yuan for every 100 yuan of sales in 1997. Economy-wide, China's SOEs reported losses rose from 3 billion yuan in 1985 to 83 billion yuan in 1997. These losses would probably be substantially higher if U.S. accounting practices were used to develop the estimates.

In principle, SOEs are allocated cotton from CJC at a fixed price. The SMC and the government textile administration determine the appropriate allocation of cotton fiber from gins to spinning mills or the local government Raw Material Company supplying the mills, and the mill pays the supplying CJC. Joint-venture mills also participate in this allocation system, although during periods of import liberalization many JVEs switch solely to imported cotton.

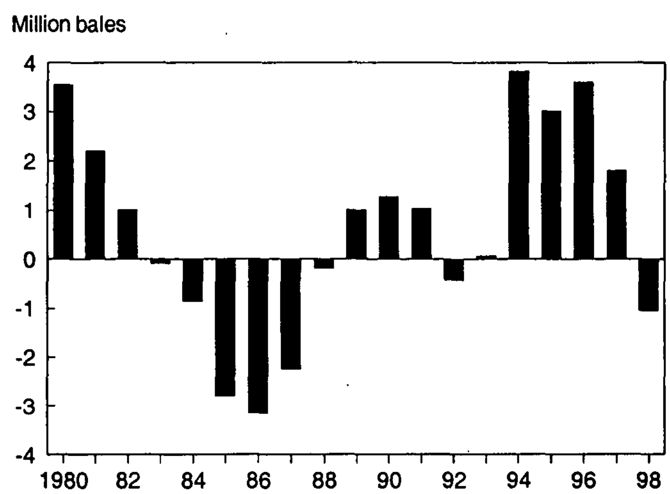
In addition to imported cotton, manmade fibers are an important alternative for China's textile industry. Manmade fiber production in China has grown rapidly, and imports are large as well. The government has encouraged increased production of manmade fibers as part of a strategy to maintain a high level of self-sufficiency in food production: Increased availability of alternative fibers helps reduce the need for cotton—which competes with grains for limited agricultural resources. The share of manmade fiber use in total fiber use has reportedly reached about 40 percent in the most industrialized regions of the coastal provinces, and may total 30-35 percent as a national average.

Trade Policy Development

Imports of raw cotton have accounted for as much as 19 percent of China's domestic mill consumption in recent years, while in the 1980s as much as 19 percent of production was exported (figure B-1). China became the world's largest cotton importer during the mid-1990s as import quotas increased sharply, and the right to purchase for import was extended to new entities in addition to the China National Textiles Import & Export Corporation (Chinatex). Later, as crop production rebounded in China, cotton import policy tightened. First, SOE mills were prevented from importing, while JVE mills were allowed to continue, but only for processing and reexport. Cotton intended for reexport as processed goods was exempt from import tariffs and from the value-added tax (VAT). However, JVEs often served as a conduit to their SOE partners, and imported cotton intended for reexport as processed goods filtered into domestic consumption. In 1998 JVE imports fell sharply in response to tighter government restrictions, and subsequently China initiated its first major export sales of cotton since the early 1990s.

Chinatex serves as the primary agent for cotton imports for SOE mills and for most of 1998 was China's sole export agent for raw cotton. It is a specialized foreign trade corporation attached to China's Ministry of Foreign Trade and Economic Cooperation (MOFERT). With its periodic monopoly role in exports and imports, Chinatex is the key actor in implementing the government's cotton trade policy. Trade policy for cotton in China is generally built around trade volume targets. These targets or quotas are developed each year by the State Council, in consultation with the CJC and others, based in part on expected cotton supply and demand. The State Council also determines the distribution of importing and exporting rights, permitting entities in

Figure B-1
China's Net Imports Reflect Alternating Scarcity and Surplus



addition to Chinatex to import or export during periods of relative scarcity and surplus, respectively.

Textile trade policy has also been used to indirectly affect the balance of fiber supply and demand in China. China's provinces often pursue self-sufficiency vis-a-vis other provinces, and cotton-producing provinces seek to consume domestic cotton before importing from other provinces. As cotton stockpiles rose in China, Xinjiang province found its stockpiles mounting particularly rapidly since it primarily grows cotton for other provinces. In 1997 China announced a basket of policies to reduce Xinjiang's stocks, boost textile exports, and ease financial pressure on the textile industry. The VAT rebate for textile products made with cotton produced in Xinjiang Province was increased to 17 percent, compared with 9 percent for products made with cotton from other provinces. In early 1998, the 9 percent was increased to 11 percent.

Trade policy decisions for cotton are made not only with the performance of the cotton sector in mind, but also in the broader contexts of agricultural policy, macroeconomic management, and international economic diplomacy. Cotton exports and imports by China are positively correlated with China's trade in soybeans, rice, and corn. These crops compete for farm area in China, and their production and trade fluctuates with policymakers' concern with food security and rural incomes. Correlations between China's net trade in cotton and trade in soybeans, rice, and corn during 1980-96, were, respectively, 73, 47, and 41 percent.

During the mid-1990s, imports of both cotton and grain soared in part due to government efforts to rein in double-digit inflation. Another macroeconomic concern during past years was the level of foreign exchange reserves, a less important issue during the 1990s due to China's investment inflows and large trade surpluses. Finally, as a country with large trade surpluses, China finds its trade policies inevitably come under international scrutiny. For a number of years, it seemed China calibrated its trade policy changes with an eye towards achieving its goal of membership in the World Trade Organization. More recently, the Asian crisis has raised more immediate concerns as China maintains its currency peg against the U.S. dollar—despite Southeast Asia's devaluations—and China's growing trade surpluses have raised concerns about the outlook for various industries in the United States and Europe.

Rigidities and Lagged Responses Lead to Problems

While most of the problems facing China's cotton sector are self-inflicted, the financial difficulties that started in Southeast Asia last year have exacerbated China's difficulties. This year China's textile exports are lagging in part due to strong competition from textile exporters in South and Southeast Asia. Since China's textile exports account for 25-40 percent of total cotton consumption, these trade difficulties, coupled with the general slowdown in China's economy, have increased enterprise debt levels and aggrevated the longstanding weaknesses in China's SOE sector.

The losses of state textile mills stem not only from growing export competition, but because SOE mills must purchase cotton inputs from the CJC largely at state-set prices that are generally much higher than if they were true market-clearing prices. The losses of textile mills lead to delinquent payments to CJC, which has also accumulated an extremely large debt overhang.

The need for reform of China's SOEs has a corollary in the need for reform in China's banking sector, which is largely state-owned. The Asian financial crisis has highlighted the role of healthy financial intermediaries in a developing economy, and with an enormously large volume of non-performing loans, many of China's banks have been far from healthy since well before the recent developments in Southeast Asia.

Centralized decisionmaking for China's cotton sector can perhaps best be characterized as "lagged decisionmaking." Procurement prices were raised substantially in 1995 in response to the shortages earlier in the 1990s. Increasing procurement prices helped raise production in China, and helped reduce world prices, but the downward price response to a recovery in world and domestic supplies was then delayed (table B-1). As of late 1998, it is not clear that this price response has occurred; while China's explicit reduction of its cotton procurement price in April 1998 was unprecedented, it was not large. Similarly, delays in changing trade policy to open the sector to imports early in the 1990s exacerbated the difficulties of the fixed-price system, and delays in restraining imports added to the stock build-up through 1997/98 that has kept black market cotton prices in China well below official prices.

The Search for Solutions

Since 1996, China has pursued a number of options to add limited price and purchasing flexibility, including acceptable bands around official prices, cotton trade fairs to encourage interaction between mills and government agencies holding cotton, increased credit provisions for transactions between CJC and the textile industry, debt write-downs, and finally reduced procurement prices in 1998. While the national procurement price cut was a modest 7 percent, the procurement price in Xinjiang has, at least in principle, been completely freed. Similarly, the sale price to mills has been completely freed, although government edicts also prohibit CJC from selling at a loss, which presumably places a floor on the prices CJC can offer.

Reform of the consumption sector also accelerated in early 1998 with a renaissance of China's perennial spindle-reduc-

Table B-1--China's Cotton Procurement Price and Cotlook's A-Index

Year	Procurement 1/	A-Index 2/	Ratio
	Yuan per metric ton		
1980/81	3,135	3,366	0.93
1981/82	3,196	2,975	1.07
1982/83	3,360	3,292	1.02
1983/84	3,419	4,259	0.80
1984/85	3,285	4,170	0.79
1985/86	3,217	3,531	0.91
1986/87	3,447	4,995	0.69
1987/88	3,856	5,928	0.65
1988/89	4,635	5,489	0.84
1989/90	5,878	8,077	0.73
1990/91	6,429	9,409	0.68
1991/92	6,237	7,582	0.82
1992/93	6,527	7,202	0.91
1993/94	9,442	11,965	0.79
1994/95	13,435	17,514	0.77
1995/96	14,754	15,729	0.94
1996/97	14,377	14,408	1.00
1997/98	14,000	13,247	1.06
1998/99	13,000	11,708	1.11

1/ 1980/81-1994/95 are weighted averages of calendar year "mixed procurement prices" published by China's State Statistical Bureau during 1980-97 and from the China Price Yearbook for 1988-95. 1995/96 is a marketing year average of monthly data from Ministry of Agriculture's Information Center. 1996/97 is a simple average of the 1995/96 mixed procurement price and the standard grade national procurement price in place from September 1995-September 1998, 14,000 yuan/ton. 1997/98 and 1998/99 are the standard grade national procurement prices. 2/ Marketing year average A-Index converted to yuan with marketing year average exchange rates estimated as weighted averages of calendar year data. 1998/99 is the average through mid-November.

tion program. A large number of obsolete spindles from loss-making SOE mills were reportedly destroyed during 1998 in response to bounties and debt relief. However, a number of retired spindles were reportedly transferred to TVE mills rather than destroyed, and it remains to be seen if the early ardor for spindle destruction can be maintained as unemployment mounts. However, textile mills account for a significant share of the SOE sector, and the combined problems of state-owned industry and banking must be addressed to ensure the long-term health of the economy. There are few if any precedents of a developing country as large as China successfully negotiating a transition to a market economy, and the issues involved are beyond the scope of this paper.

Raw cotton imports have been largely curtailed, and China's first large export sale since the early 1990s was consummated early in 1998, although shipments have been sluggish. Export rights have again reportedly been broadened to entities other than Chinatex, such as PCC state farms in Xinjiang. Exporting will be no panacea for China's cotton imbalance since a substantial portion of current stocks were presumably accumulated at prices well above likely revenues from exporting.

Exporting cotton to other countries below the price officially paid to farmers could become the focus of economic diplomacy between China and other countries exporting cotton. Inevitably, other cotton exporters would want to be reassured that such exports are implemented in a manner consistent with international norms. There are also domestic considerations that make it difficult to export below prices officially paid to farmers, since doing so would require acknowledging an economic loss somewhere in the marketing system. China's accounting practices mean that indefinitely maintaining long-standing, uncollectible debts at face value may be preferable to retiring the debt at a loss, and concluding an export transaction would appear to require closing the books on the exported cotton. Debts may even be partly fictitious if price discounts were introduced along the way, further complicating the settlement process. Under these circumstances, it is not sufficient for the State Council to simply authorize the export of a given amount. Further enabling decisions are necessary to overcome the complications introduced by a chain of debts linking procurement, industry, and banking.

These concerns do not necessarily wholly apply to Xinjiang during 1998/99. Effective procurement prices this year in Xinjiang are still unknown, and could even fluctuate for months. In addition to the price flexibility offered to the province as a whole, the PCC's organization as state farms enables it to delay payments to certain categories of farmers without imposing undue hardship, further increasing its price flexibility. Frequently in China, implicit regulations persist despite publicized policies such as price freedom, so procurement prices in Xinjiang are not necessarily able to decline without limit. But, it is conceivable that some portion of Xinjiang's 1998/99 crop could be purchased from farmers at prices that permit exporting with little or no subsidy.

Finally, the issue most central to China's cotton sector is the marketing of farm production. Maintaining continuity potentially exposes the government to large subsidies to farmers. The official procurement price is still attractive to producers, and is too high for profitable sales to textile mills by CJC. Reports from China indicate that discussion is underway to further reduce, and perhaps even free the procurement price, and to possibly limit procurement volume. Limiting government procurement volume implies de jure recognition of the de facto alternatives already functioning alongside the government monopoly. It is unclear if CJC's role would then be to administer a vastly reduced procurement at above-market prices, or vigorously compete with other purchasers for a larger share of the crop. In the absence of any current legal price-discovery institutions like the Zhengzhou, Dalian, and Shanghai markets for some grains and oilseeds, alternatives to government-fixed prices will probably require a period of transition.

However, if China successfully reembarks on the experiment last attempted in 1992/93 of legalizing alternatives to the 50-

year old government monopoly, China's cotton sector will have taken one of its largest steps towards market-driven decisionmaking. More flexible and transparent changes in China's cotton sector could increase the stability of world markets as well as those in China, a welcome prospect for many cotton producers and consumers in the rest of the world.

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